Arsenic Sensor: New Technology Challenge

Envisioned Multi-Stage Framework and Prizes

This Grand Challenge is envisioned to consist of two (2) main stages. Each stage of the competition is officially announced and launched through a separate Federal Register Notice. The vision of the framework is described below:

| | Stage 1 | Stage 2 |
|-------------------------------|---|---|
| Total Award Pool | \$50,000 | \$250,000 |
| Challenge Type | Theoretical | Reduction-to-Practice (RTP) |
| Solver | Must meet eligibility rules | Must meet <u>eligibility rules</u> ; may or may not participate in Stages 1 |
| Submission Method | White Paper: idea, details descriptors, specifications, supporting data/literature, requirements necessary to bring to practice | Bench-scale Prototype: proposed solution with demonstration of proof-of- concept data to meet/exceed Challenge requirements |
| Registration & Administration | <u>InnoCentive.com</u> | TBD |
| | -Water Prize Competition Center | -Water Prize Competition Center |
| Cross-posts | - <u>Challenge.gov</u> -Federal Register | - <u>Challenge.gov</u> -Federal Register |
| Number of Prizes | 6 prizes | 3 prizes |
| Collaborators | Reclamation EPA Xylem, Inc WE&RF WRF NIST IHS USAID USDA-ARS USGS | TBD |

In addition to the direct monetary awards, Reclamation plans to invite industry, non-profit organizations, and venture capital representatives to participate as partners and/or official judges of this competition as well as have the ability to seek and secure potential business with Solvers. Reclamation does not guarantee the participation of industry, non-profit, and venture capital representatives.

In addition, Reclamation may consider and negotiate <u>Cooperative Research and Development Agreements (CRADA)</u> with selected Solvers and/or industry participants to further develop and mature selected methods at the conclusion of the final stage of the competition. Cooperative Research and Development Agreements (CRADAs) are authorized by 15 USC 3710a.

Note: Other competitions focused on different aspects of arsenic sensor may run in parallel with this competition. As such, Stage 2 may be used for the culmination of this and other parallel competitions all with the goal of finding new and improved ways for arsenic sensing.

Reclamation may announce adjustments to the monetary prize purse and solution requirements for any stage of the competition up until the time that stage is officially launched. The prize purse for future stages may increase or decrease based on the status of Federal funding appropriations, and could include the addition of complimentary prize purse contributions that may be offered by potential future Federal and non-Federal partners. Reclamation reserves the right to cancel, suspend, and/or modify Stage 2 based on the submissions received during Stage 1 or other factors. Reclamation reserves the right not to award any prizes if no solutions meet the Solution Requirements. The award approving official is Reclamation's Science Advisor.

Visit the Arsenic Sensor webpage for more information.